

Title (en)

PIXEL WITH STRAINED SILICON LAYER FOR IMPROVING CARRIER MOBILITY AND BLUE RESPONSE IN IMAGERS

Title (de)

PIXEL MIT GESPANNTER SILICIUMSCHICHT ZUR VERBESSERUNG DER TRÄGERMOBILITÄT UND DES BLAUANSPRECHVERHALTENS IN BILDGEBERN

Title (fr)

PIXEL AVEC COUCHE DE SILICIUM CONTRAINTE POUR AMELIORER LA MOBILITE DES PORTEURS ET LA REPONSE DU BLEU DANS DES DISPOSITIFS IMAGEURS

Publication

EP 1644980 A1 20060412 (EN)

Application

EP 04777207 A 20040628

Priority

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- US 61297403 A 20030707

Abstract (en)

[origin: US2005006565A1] An imager having a pixel cell having an associated strained silicon layer. The strained silicon layer increases charge transfer efficiency, decreases image lag, and improves blue response in imaging devices.

IPC 1-7

H01L 27/146

IPC 8 full level

H01L 27/146 (2006.01); **H04N 23/12** (2023.01); **H04N 25/00** (2023.01)

CPC (source: EP KR US)

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Cited by

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US 2005006565 A1 20050113; **US 7164182 B2 20070116**; AT E504085 T1 20110415; CN 100524785 C 20090805; CN 1849708 A 20061018; DE 602004032026 D1 20110512; EP 1644980 A1 20060412; EP 1644980 B1 20110330; JP 2007529103 A 20071018; KR 100797278 B1 20080123; KR 20060028745 A 20060331; US 10134798 B2 20181120; US 10910431 B2 20210202; US 12002836 B2 20240604; US 2007057298 A1 20070315; US 2009146153 A1 20090611; US 2011059573 A1 20110310; US 2017117319 A1 20170427; US 2019058000 A1 20190221; US 2021242272 A1 20210805; US 7485904 B2 20090203; US 7872284 B2 20110118; US 9461079 B2 20161004; WO 2005008782 A1 20050127

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